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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/003,012	11/02/2001	Benjamin N. Eldridge	20206-15	3257
50905	7590	06/09/2005		
N. KENNETH BURRASTON KIRTON & MCCONKIE P.O. BOX 45120 SALT LAKE CITY, UT 84145-0120			EXAMINER NGUYEN, VINH P	
			ART UNIT 2829	PAPER NUMBER

DATE MAILED: 06/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Sam

Office Action Summary	Application No. 10/003,012	Applicant(s) ELDRIDGE ET AL.	
	Examiner VINH P. NGUYEN	Art Unit 2829	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 May 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-10, 12-16 and 27-50 is/are pending in the application.
- 4a) Of the above claim(s) 32-34 and 42-44 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3, 5-10 and 12-16 is/are allowed.
- 6) ☒ Claim(s) 27, 35, 36, 39 and 40 is/are rejected.
- 7) ☒ Claim(s) 29-31, 37, 38, 41 and 45-50 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>0205,0405</u> . | 6) <input type="checkbox"/> Other: _____ |

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 27-28, 35-36, 39-40 are rejected under 35 U.S.C. 102(e) as being anticipated by Sano (Pat # 6,710,615).

As to claims 27-28, Sano discloses an apparatus as shown in figure 7 having a probe card (40) with a plurality of probes (41) for making contact with a device under test (3) and a shock absorber (58) for ensuring a firm electrical contact between the probes and device under test (3). According to Sano, the probe card (40) is under thermal expansion, the shock absorber (58) is used to transmit energy (force) to the probe card in order to counteract thermal induced bowing of the probe card so that the probes (41) would make proper contact with the device under test (3), therefore this shock absorber (58) is qualified as “an energy transmissive element”.

As to claim 35, Sano also discloses in figure 7 a heater (57) for heating up the probe card (40). Since the heater (57) is turned on/off, this heater is read as “means for reducing a temperature gradient between the device side of the probe card and the second side of the probe card.”

As to claim 36, means for for reducing a temperature gradient is disposed on the second side of the probe card.

As to claim 39, when the heater (57) is turned on, this heater affect a temperature on the second side of the probe card.

As to claim 40, it appears that when the electronic device under test (3) is under test, it induces the temperature gradient.

3. Since generic claims 1 is allowable, non elected claims 6-9,13-16 are hereby rejoined and allowed along with claims 1-3,5,10,12

4. Claims 1-3,5-10 and 12-16 are allowable since the prior art does not disclose an energy transmissive element for transmitting energy to selectively deflect a portion of the probe card and for controlling the geometric planarity of the probe card and a temperature sensor located near the energy transmissive element for monitoring temperature corresponding to deflection of the probe card.

5. Claims 29-31,37-38,41,47-50 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art does fails to disclose energy transmissive elements for affecting a temperature on the device side and second side of the probe card and a temperature sensor for monitoring the temperatures on the first device side and a second side of the probe card.

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6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Nagar (Pat # 6,605,954) disclose reducing probe card substrate warpage.

Miki (pat # 6,710,615) disclose semiconductor element test apparatus and method of testing semiconductor element using the apparatus.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VINH P. NGUYEN whose telephone number is 571-272-1964. The examiner can normally be reached on 6:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on 571-272-2034. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


VINH P NGUYEN
Primary Examiner
Art Unit 2829
06/06/85